

## TPX-24x

## Triplexer | 700+800+900 / 1800 / 2100 | Single and Twin Units | Indoor / Outdoor

- Combines 700+800+900, 1800 and 2100 MHz into a single output
- Usable at BTS or antenna end
- Available as single or twin unit, with Auto-Sense or various DC/AISG bypass configurations
- Suitable for indoor or outdoor applications
- Pole or wall mounting
- Available with 7/16-DIN or 4.3-10 Connectors

When ordering replace "x" with correct option for bypass configuration and single or twin unit.With DC/AISG Auto-SenseTPX-24ATPX-24A-43FTFDC/AISG bypass from common to 2100 portTPX-242TPX-242-43FTDC/AISG bypass from common to 1800 portTPX-240TPX-240-43FTDC/AISG bypass from common to 700+800+900 portTPX-248TPX-248-43FTDC/AISG bypass from common to 1800 & 2100 portsTPX-2410TPX-2410-43FTDC/AISG bypass from common to 700+800+900 & 2100 portsTPX-2412TPX-2410-43FTDC/AISG bypass from common to 700+800+900 & 2100 portsTPX-2412TPX-2412-43FTDC/AISG bypass from common to 700+800+900 & 2100 portsTPX-2412TPX-2412-43FTFull DC/AISG bypassTPX-244-43FTT	7/16-DIN PX-24AA TPX-243 TPX-241 TPX-249 TPX-2411 TPX-2413 TPX-245 TPX-245	4.3-10 TPX-24AA-43F TPX-243-43F TPX-241-43F TPX-249-43F TPX-2411-43F TPX-2413-43F TPX-2413-43F				
With DC/AISG Auto-Sense     TPX-24A     TPX-24A     TPX-24A-43F     TF       DC/AISG bypass from common to 2100 port     TPX-242     TPX-242-43F     T       DC/AISG bypass from common to 1800 port     TPX-240     TPX-240-43F     T       DC/AISG bypass from common to 1800 port     TPX-240     TPX-240-43F     T       DC/AISG bypass from common to 700+800+900 port     TPX-248     TPX-248-43F     T       DC/AISG bypass from common to 1800 & 2100 ports     TPX-2410     TPX-2410-43F     T       DC/AISG bypass from common to 700+800+900 & 2100 ports     TPX-2410     TPX-2412-43F     T       DC/AISG bypass from common to 700+800+900 & 2100 ports     TPX-2412     TPX-2412-43F     T       Full DC/AISG bypass     TPX-244     TPX-244-43F     T       No DC/AISG bypass     TPX-244     TPX-246-43F     T       No DC/AISG bypass     TPX-246     TPX-246-43F     T       Frequency Band     698-960 MHz     T       Insertion Loss     Typical     0.1 dB     0.2 dB	TPX-243 TPX-241 TPX-249 TPX-2411 TPX-2413 TPX-245	TPX-243-43F TPX-241-43F TPX-249-43F TPX-2411-43F TPX-2413-43F TPX-2413-43F				
DC/AISG bypass from common to 2100 port   TPX-242   TPX-242-43F   T     DC/AISG bypass from common to 1800 port   TPX-240   TPX-240-43F   T     DC/AISG bypass from common to 700+800+900 port   TPX-248   TPX-248-43F   T     DC/AISG bypass from common to 700+800+900 port   TPX-2410   TPX-248-43F   T     DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-2410   TPX-2410-43F   T     DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-2412   TPX-2412-43F   T     Full DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-24412   TPX-2412-43F   T     Full DC/AISG bypass   TPX-244   TPX-244-43F   T     No DC/AISG bypass   TPX-244   TPX-246-43F   T     No DC/AISG bypass   TPX-246   TPX-246-43F   T     Electrical Characteristics   TPX-246   TPX-246-43F   T     Frequency Band   698-960 MHz   698-960 MHz   0.1 dB   0.2 dB     Insertion Loss   Typical   0.2 dB   0.2 dB   0.2 dB   0.2 dB	TPX-243 TPX-241 TPX-249 TPX-2411 TPX-2413 TPX-245	TPX-243-43F TPX-241-43F TPX-249-43F TPX-2411-43F TPX-2413-43F TPX-2413-43F				
DC/AISG bypass from common to 1800 port   TPX-240   TPX-240-43F   T     DC/AISG bypass from common to 700+800+900 port   TPX-248   TPX-248-43F   T     DC/AISG bypass from common to 700+800+900 ports   TPX-2410   TPX-2410-43F   T     DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-2410   TPX-2412-43F   T     DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-2412   TPX-2412-43F   T     Full DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-244   TPX-244-43F   T     Full DC/AISG bypass   TPX-244   TPX-244-43F   T     No DC/AISG bypass   TPX-246   TPX-246-43F   T     No DC/AISG bypass   TPX-246   TPX-246-43F   T     Frequency Band   698-960 MHz     Insertion Loss   Typical   0.1 dB     Insertion Loss   Typical   0.2 dB   0.2 dB	TPX-241 TPX-249 TPX-2411 TPX-2413 TPX-245	TPX-241-43F TPX-249-43F TPX-2411-43F TPX-2413-43F TPX-245-43F				
DC/AISG bypass from common to 700+800+900 port   TPX-248   TPX-248-43F   T     DC/AISG bypass from common to 1800 & 2100 ports   TPX-2410   TPX-2410-43F   T     DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-2412   TPX-2412-43F   T     DC/AISG bypass from common to 700+800+900 & 2100 ports   TPX-2412   TPX-2412-43F   T     Full DC/AISG bypass   TPX-244   TPX-244-43F   T     No DC/AISG bypass   TPX-246   TPX-246-43F   T     Electrical Characteristics   TPX-246   TPX-246-43F   T     Frequency Band   698-960 MHz   698-960 MHz   698-960 MHz     Insertion Loss   Typical   0.1 dB   0.2 dB   0.2 dB	TPX-249 TPX-2411 TPX-2413 TPX-245	TPX-249-43F TPX-2411-43F TPX-2413-43F TPX-245-43F				
DC/AISG bypass from common to 1800 & 2100 ports     TPX-2410     TPX-2410-43F     TI       DC/AISG bypass from common to 700+800+900 & 2100 ports     TPX-2412     TPX-2412-43F     TI       Full DC/AISG bypass     TPX-246     TPX-244-43F     TI       No DC/AISG bypass     TPX-246     TPX-246-43F     T       No DC/AISG bypass     TPX-246     TPX-246-43F     T       Electrical Characteristics       700+800+900 Channel (Port 1) - Common       Frequency Band     698-960 MHz       Insertion Loss     Typical     0.1 dB       Max     0.2 dB     0.2 dB	PX-2411 PX-2413 TPX-245	TPX-2411-43F TPX-2413-43F TPX-245-43F				
DC/AISG bypass from common to 700+800+900 & 2100 ports     TPX-2412     TPX-2412-43F     TI       Full DC/AISG bypass     TPX-244     TPX-244-43F     T       No DC/AISG bypass     TPX-246     TPX-246-43F     T       Electrical Characteristics     TPX-246     TPX-246-43F     T       Frequency Band     698-960 MHz     698-960 MHz     1       Insertion Loss     Typical     0.1 dB     0.2 dB     0.2 dB	TPX-2413 TPX-245	TPX-2413-43F TPX-245-43F				
TPX-244     TPX-244-43F     T       No DC/AISG bypass     TPX-246     TPX-246-43F     T       Electrical Characteristics       TO0+800+900 Channel (Port 1) - Common       Frequency Band     698-960 MHz       Typical     0.1 dB       Insertion Loss     Typical     0.2 dB	TPX-245	TPX-245-43F				
No DC/AISG bypass     TPX-246     TPX-246-43F     T       Electrical Characteristics       700+800+900 Channel (Port 1) - Common       Frequency Band       698-960 MHz       Insertion Loss     Typical     0.1 dB       Max     0.2 dB     0.2 dB						
Electrical Characteristics       700+800+900 Channel (Port 1) - Common       Frequency Band     698-960 MHz       Insertion Loss     Typical     0.1 dB       Max     0.2 dB	TPX-247					
T00+800+900 Channel (Port 1) - Common       Frequency Band     698-960 MHz       Insertion Loss     Typical     0.1 dB       Max     0.2 dB		TPX-247-43F				
Frequency Band 698-960 MHz   Insertion Loss Typical 0.1 dB   Max 0.2 dB						
Insertion Loss Typical 0.1 dB 0.2 dB						
Insertion Loss Max 0.2 dB	698-960 MHz					
Max 0.2 dB						
Return Loss > 18 dB	0.2 dB					
1710-1880 MHz 50 dB	50 dB					
Rejection     1920-2170 MHz     50 dB	50 dB					
Continuous Average Power 250 W	250 W					
Intermodulation, 2x43 dBm TX Carrier, IM3 -117 dBm	-117 dBm					
1800 Channel (Port 2) - Common						
Frequency Band 1710-1880 MHz	1710-1880 MHz					
Typical 0.2 dB	0.2 dB					
Insertion Loss Max 0.45 dB	0.45 dB					
Return Loss > 18 dB	> 18 dB					
698-960 MHz 50 dB	50 dB					
Rejection     1920-2170 MHz     50 dB	50 dB					
Continuous Average Power 250 W	250 W					
Intermodulation, 2x43 dBm TX Carrier, IM3 -117 dBm	Carrier, IM3 -117 dBm					
2100 Channel (Port 3) - Common						
Frequency Band 1920-2170 MHz						
Typical 0.2 dB	0.2 dB					
Insertion Loss Max 0.5 dB	0.5 dB					
Return Loss > 18 dB	> 18 dB					
Rejection     698-1880 MHz     50 dB	50 dB					
Continuous Average Power 250 W	250 W					
Intermodulation, 2x43 dBm TX Carrier, IM7 -125 dBm (typical)						

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.



## TPX-24x

Triplexer | 700+800+900 / 1800 / 2100 | Single and Twin Units | Indoor / Outdoor

General Electrical	Standard Models	Models With Auto-Sense			
DC Bypass Rating	3 A	2 A, drop max 2.4 V			
AISG Pass	Yes				
AISG RL		> 12 dB			
AISG Loss		< 1 dB			
MTBF	1 Mh (min)	1 Mh (min)			
Lightning Protection	±5 kA 8/20 μs	±5 kA 8/20 μs			
Input Voltage Power		8-30 V max 0.3 W			
Environmental					
Temperature Range	-40° to +65° C (-40° to 149° F)				
Environmental	ETS 300 019-1-4 Class 4.1E				
Safety	IEC/EN 62368-1				
Ingress Protection	IP67				
Mechanical Characteristics	Single Unit	Twin Unit			
Finish	Light Grey, NCS 1502-R				
Connectors	7/16 Female or 4.3-10 Female				
Dimensions (H x W x D)	150 x 170 x 50 mm (5.9 x 6.7 x 2.0 in)	TBD			
Weight	2.6 kg (5.7 lbs)	TBD			
Mounting Options	Description				
Pole / Wall Bracket	Two metal clamps for pole mount included; Pole Diameter 40-140 mm (1.57-5.5 in)				

Block Diagrams						
DC/AISG Bypass 2100 Port	DC/AISG Bypass 1800 Port	DC/AISG Bypass 700+800+900 Port	DC/AISG Bypass 1800 & 2100 Port	DC/AISG Bypass 700+800+900 & 2100 Port	Full DC/AISG Bypass	No DC/AISG Bypass
700-900 1800 2100	700-900 1800 2100	700-900 1800 2100	700-900 1800 2100	700-900 1800 2100	700-900 1800 2100	700-900 1800 2100
TPX-242 TPX-243	TPX-240 TPX-241	TPX-248 TPX-249	TPX-2410 TPX-2411	TPX-2412 TPX-2413	TPX-244 TPX-245	TPX-246 TPX-247

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